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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,658	02/04/2002	Heather N. Bean	10018569-1	6946

22879 7590 10/19/2005

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EXAMINER

JERABEK, KELLY L

ART UNIT PAPER NUMBER

2612

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/067,658	Applicant(s) BEAN ET AL.	
	Examiner Kelly L. Jerabek	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 13-16 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 13-16 and 18-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 8/2/2005 have been fully considered but they are not persuasive.

Response to Remarks:

Applicant's arguments (Amendment page 9) state that the Lee reference does not disclose or suggest that the frame rate can be selected **during image capture** as required by claim 1. The Examiner respectfully disagrees. Lee discloses in figures 2-6 a camera system capable of capturing video images at different frame rates. The camera system includes video capture selector (55) having a first operating state in which the camera captures image data at a first rate and a second operating state in which the camera captures image data at a second rate different from the first rate (col. 4, line 9 – col. 5, line 45). It can be seen in figure 2 (block 21) that a frame rate is commanded by a user and then continuous image capture operations are carried out (col. 3, line 25-col. 4, line 9). A frame rate selection signal (SEL) is generated from by user-controlled external switch in order to command a selection of frame rates (col. 5, lines 36-45). Since the frame rate selection signal (SEL) is generated by a user-controlled switch and Lee does not disclose that the switch is disabled at any time, it is

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inherent that the user may actuate the switch in order to vary the frame rate at any time. Therefore, after a user commands a frame rate and continuous image capture is started, the user-controlled switch may be pressed at any time after the initial actuation in order to vary the frame rate during continuous image capture.

Applicant's arguments with respect to claims 2-7, and 13-16 (Amendment pages 10-12) have the same grounds as the arguments above therefore the Examiner's response above also applies to these arguments.

Applicant's arguments with respect to claims 18-22 have been considered but are moot in view of the new ground(s) of rejection.

Claims 1 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al. US 6,614,477.

Re claim 1, Lee discloses in figures 2-6 a camera system capable of capturing video images at different frame rates. The camera system includes video capture selector (55) having a first operating state in which the camera captures image data at a first rate and a second operating state in which the camera captures image data at a second rate different from the first rate (col. 4, line 9 – col. 5, line 45). It can be seen in figure 2 (block 21) that a frame rate is commanded by a user and then continuous image capture operations are carried out (col. 3, line 25-col. 4, line 9). A frame rate

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selection signal (SEL) is generated from by user-controlled external switch in order to command a selection of frame rates (col. 5, lines 36-45). Since the frame rate selection signal (SEL) is generated by a user-controlled switch and Lee does not disclose that the switch is disabled at any time, it is inherent that the user may actuate the switch in order to vary the frame rate at any time. Therefore, after a user commands a frame rate and continuous image capture is started, the user-controlled switch may be pressed at any time after the initial actuation in order to vary the frame rate during continuous image capture.

Re claim 13, see claim 1. Lee discloses in figures 2-6 a camera system capable of capturing video images at different frame rates. The camera system includes CCD (42) for image capture. Lee discloses in figure 3 a timing diagram for image data generation. Lee states that gate signals are applied to the image capture device for every other field (310) responsive to a command frame rate that can be varied according to a signal applied by a variable frame rate image capture controller (55) (col. 3, lines 49-64). The video capture selector (55) has a first operating state in which the camera captures image data at a first rate and a second operating state in which the camera captures image data at a second rate different from the first rate (col. 4, line 9 – col. 5, line 45). The selector (55) is switchable between the first and second states during continuous image capture and the the frame rate selection signal (SEL) may be produced from a user-controlled external switch (col. 5, lines 36-44). Therefore, it can be seen that according to the gate signals applied to a succession of fields (310) the

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camera system provides a method of creating video of an object comprising: imaging an object on a photodetector array; in response to a first user input applied to a variable-frame-rate-trigger (user-controlled switch controlling SEL) : generating a first image data set representative of said object; then waiting a first period of time (time between gate enable signals), then generating a second image data set representative of the object; in response to a second user input applied to said variable-frame-rate-trigger, wherein said second user input is different than said first user input (commanded frame rate is changed); generating a third image data set representative of said object (corresponding to the different commanded frame rate); then waiting a second period of time (time between gate enable signals at different commanded frame rate), then generating a fourth image data set representative of the object, wherein said second period of time is different than said first period of time (gate signals vary for varied frame rates (col. 3, lines 35-42); streaming said first image data set, said second image data set, said third image data set, and said fourth image data set (digital camera processor (45) processes the digital video signals at the selected frame rate and generates composite video for output (col. 4, lines 9-31)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al.

Re claim 18, Lee discloses in figures 2-6 a camera system capable of capturing video images at different frame rates. The camera system includes video capture selector (55) having a first operating state in which the camera captures image data at a first rate and a second operating state in which the camera captures image data at a second rate different from the first rate (col. 4, line 9 – col. 5, line 45). It can be seen in figure 2 (block 21) that a frame rate is commanded by a user and then continuous image capture operations are carried out (col. 3, line 25-col. 4, line 9). A frame rate selection signal (SEL) is generated from by user-controlled external switch in order to command a selection of frame rates (col. 5, lines 36-45). Thus, the camera is caused to initiate image data acquisition by actuating a switch (external switch for producing SEL signal) and the camera varies the frame rate by selectively operating the user-controlled switch. Although the Lee reference discloses the above limitations, it fails to distinctly state that the user-controlled switch is located on the exterior of the camera. The Examiner takes **Official Notice** that it is well known in the art to place user-controlled switches on the exterior surface of a camera. Therefore, it would have been obvious for one skilled in the art to have been motivated to place the user-controlled switch for

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varying frame rate as disclosed by Lee on the exterior surface of a camera so that the switch may be easily accessed by a user of the camera.

Re claim 19, the camera system disclosed by Lee includes video capture selector (55) having a first operating state in which the camera captures image data at a first rate and a second operating state in which the camera captures image data at a second rate different from the first rate (col. 4, line 9 – col. 5, line 45). It can be seen in figure 2 (block 21) that a frame rate is commanded by a user and then continuous image capture operations are carried out (col. 3, line 25-col. 4, line 9). A frame rate selection signal (SEL) is generated from by user-controlled external switch in order to command a selection of frame rates (col. 5, lines 36-45). Since the frame rate selection signal (SEL) is generated by a user-controlled switch and Lee does not disclose that the switch is disabled at any time, it is inherent that the user may actuate the switch in order to vary the frame rate at any time. Therefore, after a user commands a frame rate and continuous image capture is started, the user-controlled switch may be pressed at any time after the initial actuation in order to vary the frame rate while the camera is acquiring image data.

Claims 2-5 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. in view of Ohkawara et al. US 6,630,950.

Re claims 2-5 and 21-22, Lee discloses all of the limitations of claims 1 and 18 above. However, Lee only mentions that the frame rate selection signal (SEL) may be produced from a user-controlled external switch but does not further detail the switch.

Ohkawara discloses in figure 7 a camera including a rotary zoom switch. The rotary zoom switch (148) produces a signal based on a resistance that changes in accordance with the pressure exerted on the switch (col. 11, lins 1-12). Thus, the switch is progressively actuatable according to the force exerted on the switch. Therefore, it would have been obvious for one skilled in the art to have been motivated to include a switch with a resistance that varies in accordance with pressure exerted as disclosed by Ohkawara in the camera system disclosed by Lee. Doing so would provide a means for providing a switch that outputs a signal based on the pressure exerted on the switch (Ohkawara: col. 11, lines 1-12).

Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. in view of Niikawa US 6,710,809.

Re claims 6-7, Lee discloses all of the limitations of claim 1 above. However, Lee does not distinctly state that the camera system includes a feedback (visual notification) of selection of the first rate and second rate.

Niikawa discloses in figures 10A-10D, a sub-display (100) of a camera. The sub-display (100) provides feedback (visual notification) of selection of processes (S103-

S106) (col. 12, lines 37-54). Therefore, it would have been obvious for one skilled in the art to have been motivated to include a visual notification of selection of camera processes as disclosed by Niikawa in the camera system including a frame rate selector disclosed by Lee. Doing so would provide a means for updating a display so that current settings selected by a user are displayed in order to inform a user of the current settings (Niikawa: col. 12, lines 37-54).

Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. in view of Matsumoto et al. US 6,795,642.

Re claims 14-15 Lee discloses in figures 2-6 a camera system capable of capturing video images at different frame rates. The camera system includes video capture selector (55) having a first operating state in which the camera captures image data at a first rate and a second operating state in which the camera captures image data at a second rate different from the first rate (col. 4, line 9 – col. 5, line 45). The selector (55) is switchable between the first and second states during continuous image capture and the the frame rate selection signal (SEL) may be produced from a user-controlled external switch (col. 5, lines 36-44). Lee also states that a digital camera processor (45) processes the digital video signals at the selected frame rate and generates composite video for output (col. 4, lines 9-31). Although the Lee reference discloses the above limitations it fails to distinctly state that the first and second pluralities of images at first and second frame rates are stored.

Matsumoto discloses in figure 1 a video recording apparatus (2). The video recording apparatus (2) is capable of storing variable frame rate video image signals (col. 3, lines 34-67). Therefore, it would have been obvious for one skilled in the art to have been motivated to include a means for storing video images signals of varying frame rates as disclosed by Matsumoto in the camera system disclosed by Lee. Doing so would provide a means for storing video signals that have different frame rates.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. in view of Matsumoto et al. and further in view of Niikawa.

Re claim 16, Lee in view of Matsumoto discloses all of the limitations of claim 15 above. However, the combination does not distinctly state that the camera system includes a feedback (visual notification) of selection of the first rate and second rate. Niikawa discloses in figures 10A-10D, a sub-display (100) of a camera. The sub-display (100) provides feedback (visual notification) of selection of processes (S103-S106) (col. 12, lines 37-54). Therefore, it would have been obvious for one skilled in the art to have been motivated to include a visual notification of selection of camera processes as disclosed by Niikawa in the camera system including a frame rate selector disclosed by Lee in view of Matsumoto. Doing so would provide a means for updating a display so that current settings selected by a user are displayed in order to inform a user of the current settings (Niikawa: col. 12, lines 37-54).

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. in view of Yamamoto et al. US 6,856,345.

Re claim 20, Lee discloses all of the limitations of claim 18 above. However, Lee merely discloses a user-controlled external switch for commanding a frame rate and subsequently capturing frames at the commanded frame rate. Lee does not specifically state that the user-controlled switch for commanding a frame rate is also a shutter switch capable of starting and stopping an image capturing process (the camera stops image data acquisition by discontinuing actuation of the switch).

Yamamoto discloses in figures 1-5 a camera including a shutter switch (7) that is capable of starting and stopping an image capturing operation when the switch (7) is half-pressed and starting a printing operation when the switch (7) is full-pressed (col. 3, lines 29-51). The camera disables the image capturing operation when the switch (S1) is not on (by discontinuing actuation of the switch 7) (col. 10, lines 15-42). Yamamoto teaches that a shutter button (7) can be used to start and stop an image capture operation and also to perform other camera operations (eg. Printing) according to a half-press and a full-press operation of the shutter button (7). Therefore, it would have been obvious for one skilled in the art to have been motivated to command a frame rate of a camera as disclosed by Lee using a shutter button that is capable of starting and stopping image capture as well as performing other camera operations as disclosed by

Yamamoto. Doing so would provide a means for reducing the number of buttons required to control camera operations and thus providing a more user-friendly camera.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly L. Jerabek whose telephone number is (571) 272-7312. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Yen Vu can be reached on (571) 272-7320. The fax phone number for submitting all Official communications is 703-872-9306. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at (571) 273-7312.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KLJ


NGOC-YEN VU
PRIMARY EXAMINER